

**CLAIMS:**

1. Improved high-performance permeable concrete obtained by spreading and compacting a mixture which comprises 1,500-1,850 kg/m<sup>2</sup> of aggregates; 320-400 kg/m<sup>2</sup> of Portland cement; 28-35% of the cement (90-140 kg/m<sup>2</sup>) of water; 2-5% of the cement (6-20 kg/m<sup>2</sup>) of a pigment; and 3-10% of the cement (10-40 kg/m<sup>2</sup>) of charcoal dust, 7-15% of the cement (22-60 kg/m<sup>2</sup>) being substituted for particulates of blast furnace slag,

and having the compressive strength of 120-300 kgf/cm<sup>2</sup> and the permeability coefficient of  $2 \times 10^{-2}$  cm/sec or more.

10

2. The improved high-performance permeable concrete as claimed in claim 1, wherein the aggregates can be rubble aggregates, recycled aggregates or a mixture thereof, and comprise 10-30% of the aggregates of the size 5mm or less, 50-80% of the size 5-10mm, and the balance of the size 10-13mm.

15

3. The improved high-performance permeable concrete as claimed in claim 1, wherein 600-1,200 g/m<sup>2</sup> of polyvinyl alcohol fiber, which is concrete hydrophilic, is further provided to the mixture to prevent cracks of the permeable concrete.

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4. The improved high-performance permeable concrete as claimed in claim 2, wherein 600-1,200 g/m<sup>2</sup> of polyvinyl alcohol fiber, which is concrete hydrophilic, is further provided to the mixture to prevent cracks of the permeable concrete.

5. The improved high-performance permeable concrete as claimed in claim 1, wherein polymer resin such as epoxy, urethane or degenerated acrylic resin including urethane powder of the size 0.01-0.5mm is spread on the surface of the permeable concrete layer to prevent sliding on the surface.

5

6. The improved high-performance permeable concrete as claimed in claim 2, wherein polymer resin such as epoxy, urethane or degenerated acrylic resin including urethane powder of the size 0.01-0.5mm is spread on the surface of the permeable concrete layer to prevent sliding on the surface.